

THE ECONOMIC SITUATION

A Quarterly Commentary

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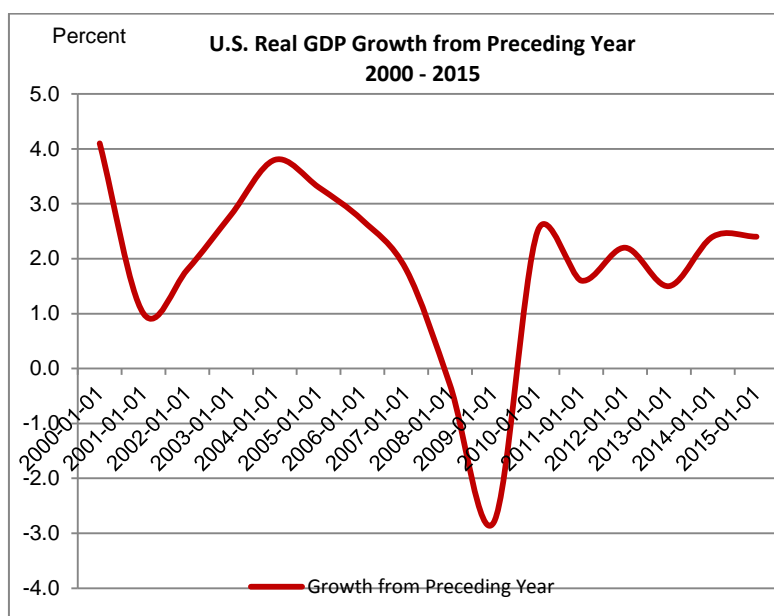
March 1, 2016

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Life in the slow lane

With falling exports induced by a strong-dollar, declining investment in the energy sector driven by falling oil prices, and a Chinese economy that continues to weaken, albeit at a slower downward pace, the U.S. economy seems to be locked in low gear. GDP growth for 4Q2015 came in at a snail-paced 0.7%, giving 2.4% growth for the year, the same as for 2014. And guess what? Forecasts for 2016 and 2017 basically call for more of the same. Pass the word. The world is flat!

Some suggest we might as well get used to it. It's been 15 years since we saw 4.0% and 9 years since 3.0%. Somehow, the Great Recession seems to have ripped high gear from the economy's transmission, and came with no warranty.



Is there a way to repair the Great American Bread Machine? Is there a 2016 recession in the cards? Must we just get used to it?

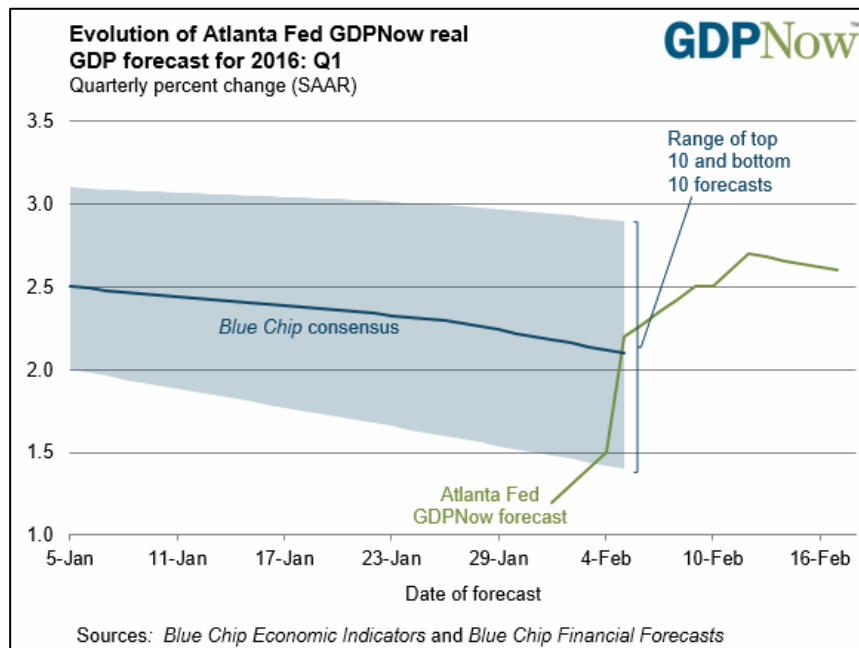
The forecasters are saying “get used to it”

A quick survey of forecasters reported next shows no evidence of a recession, even though there are some pretty weak numbers. But GDP growth at 2.5% is becoming the 2016 norm. Notice that 2017 does not look better. Here are the numbers from six major institutions.

GDP Growth Forecasts

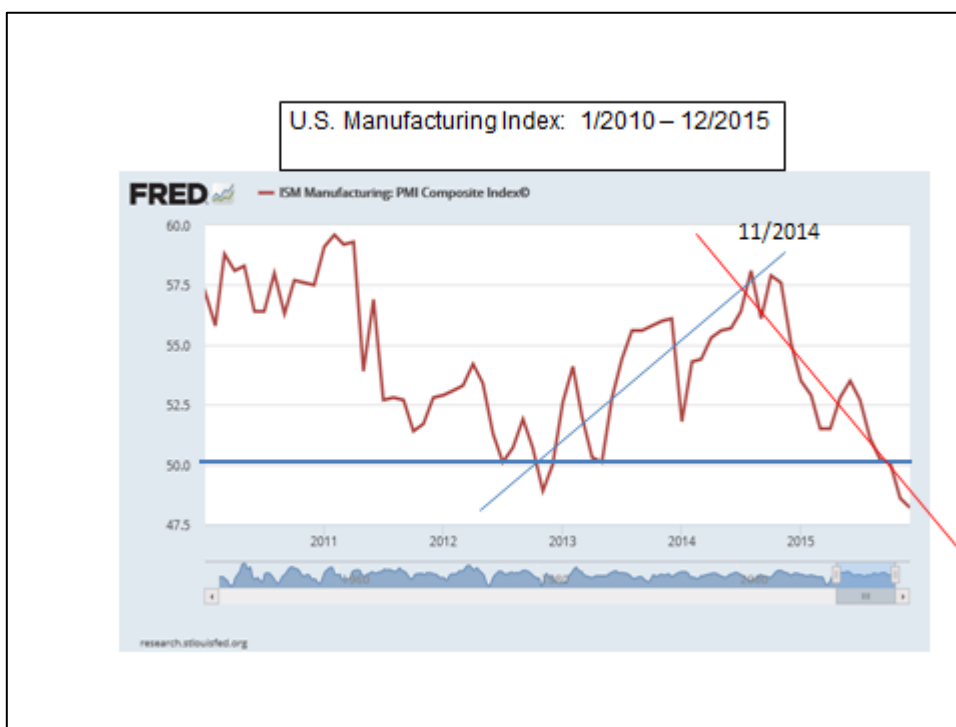
	2016	2017
CBO	2.5%	2.5%
Merrill Lynch	2.5%	
Morgan Stanley	1.8%	1.8%
OMB	2.6%	2.6 %
Wells Fargo	1.8%	2.3%
World Bank	2.7%	2.4%

GDPNow provided every couple of weeks by the Atlanta Federal Reserve Bank points a bit beyond 2.5% growth, at least on a quarterly basis. So be happy! As the chart here indicates, this is up from less than 1.0% growth observed in January.

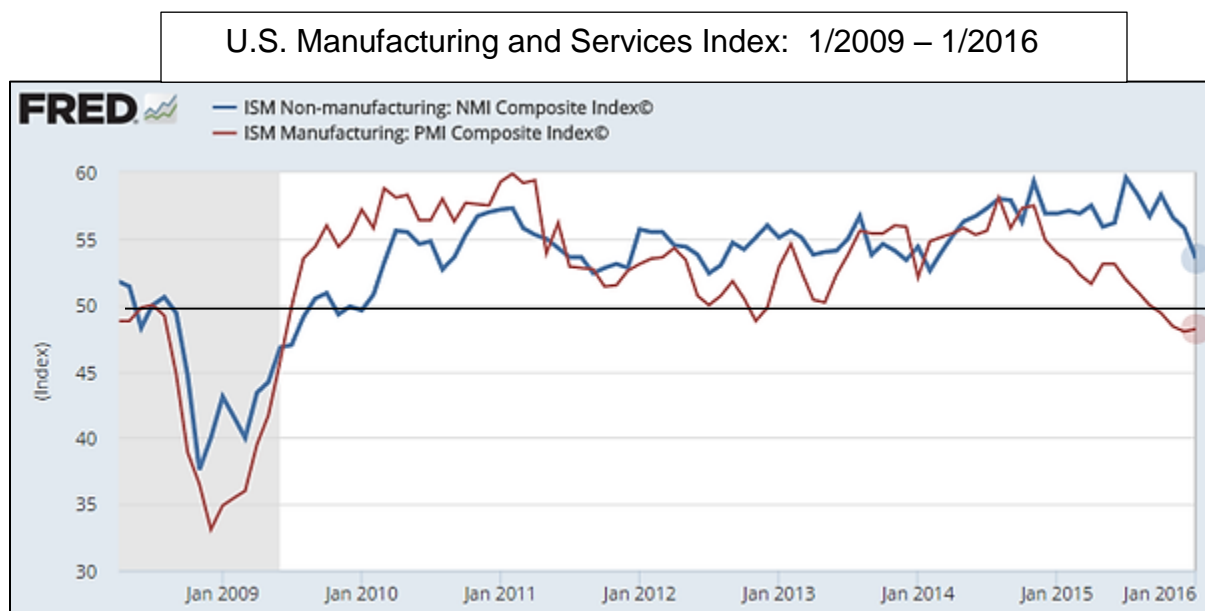


But will we get a recession in manufacturing?

In spite of the pale but positive 2016 GDP forecast, there is a pronounced slowdown occurring in U.S. manufacturing. That sector accounts for 12% of total value added in the economy. Energy production, which accounts for another 2% of total value added, is also in decline. The next chart gives the manufacturing side of the story. Notice how growth in manufacturing activity accelerated until around the end of 2014 and then decelerated and went negative in 2015's last half. The change of pace resulted from the stronger dollar, the slowing Chinese economy, and general weakness in the world economy. We now have four consecutive months of negative growth in manufacturing output.



The chart that follows compares growth data for manufacturing and the nonmanufacturing or services economy. Note that manufacturing is leading the decline, while the pace of the services economy is much stronger. The number 50 in the chart is the neutral point. A number less than 50 implies negative growth.

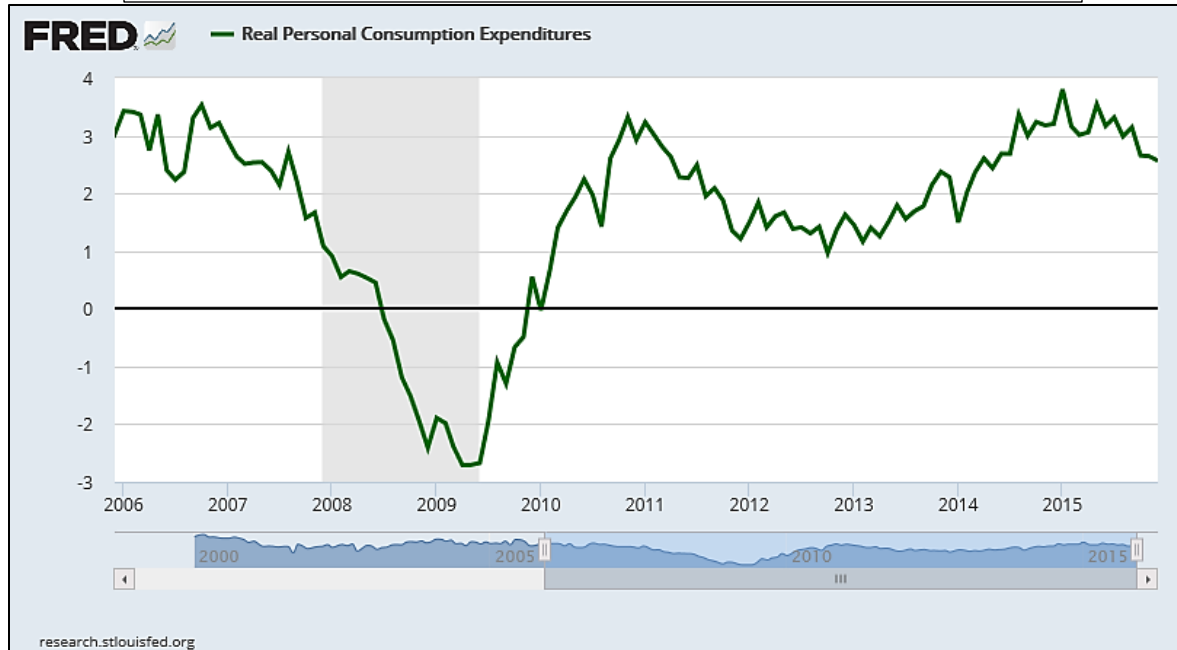


We might say that the economy is experiencing a manufacturing recession now, and energy production is doing no better. So what are the chances that manufacturing and energy (14% of the economy) might bring down the services economy (which accounts for 67% of total value added) and generate a full recession?

Wells Fargo economists addressed this question in a February 2016 study titled *Can Manufacturing Bring Down the Services Economy?* Their statistical analysis showed that a 3% decline in manufacturing value added would be required to push services, into negative growth territory. Data for manufacturing value added through 3Q2015 are now available. These data show annual growth rates of 0.6% for 3Q2015 and 0.2% growth for each of the preceding two quarters. No, we don't have negative numbers yet, but we are getting close to negative. Can we count on the reliable consumer to push the economy forward. What does growth in real consumption data tell us? The data in the next chart are encouraging.

Growth in Real Personal Consumption Expenditures Year-Over-Year, 1/2006 – 12/2015

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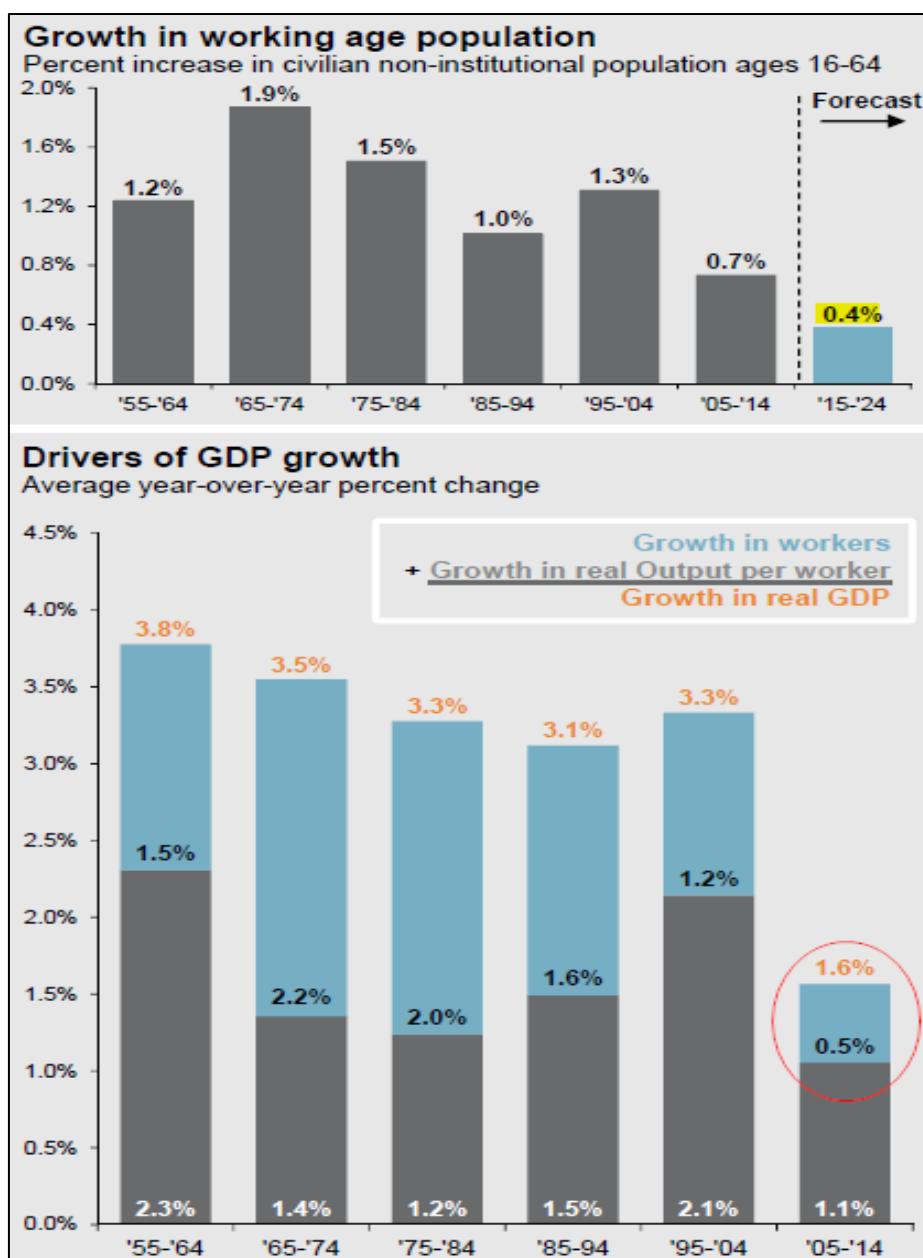


A 2016 overall recession? The signals are for weakness, not negative growth. Put another way, the caution light is just barely yellow. The U.S. economy travels on.

Could the forecasters be overly pessimistic?

With low-gear GDP growth churning at 2.0% to 2.5% annually, what are the prospects for once again riding on the 3.0% yellow brick road? Will we see higher steady state growth in the next few years? The quick answer says not likely. Here's why. There are two basic short-run ingredients that determine real GDP growth: growth of work-age population and growth in productivity. Take a look at the next two charts. Both number look pale for the next few years.

As indicated in the top of the duplex chart, work-age population is predicted to grow at the low historic level of 0.4% in the next decade. The bottom part of the charts looks at what happened in the most recent decade, 2005-2014. Here we see the result of low growth in productivity combining with small growth in the work-age population.



But wait a minute. Are these numbers carved in stone, or are they the result of human action based on incentives? Surely, it is the latter. So what might cause a larger increase in the labor utilization? After all, not all the work-age population works. Indeed, the labor participation rate has been falling for more than a decade. Will some of these people come back to work? Perhaps. A significant number are comfortably caught in a welfare trap that opened during the Great Recession. Recipients of disability income and other welfare benefits pay a high price when they go to work; they forfeit most of their welfare benefits. On the other hand, a lot of young people who

decided to go to college during the bleak recession years are now leaving college and joining the workforce, or at least trying to do so. We cannot know the overall outcome that will emerge from these different forces, but we can bet on the prospect of little in the way of sudden change in labor participation.

What about productivity? Well, that depends on the rate of technology change, inventions and innovation. New ways of doing business like Uber and Airbnb can bring meaningful gains, but we can't expect sudden breakthroughs that will change markedly the economic pace in the next couple of years. It takes longer. But then there are man-made restrictions, regulations that prevent adaptation and production expansions. Those barriers are pretty stout, and they are not likely to yield very much in the next five or so years. But that also could change. Over the longer term, there are meaningful possibilities..., at least theoretically.

Money: does it really matter?

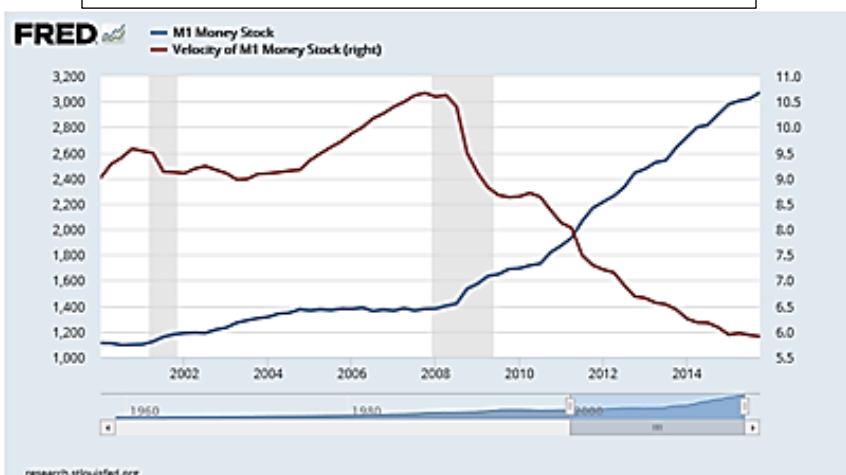
Back in 1911, economist Irving Fisher focused attention on the Equation of Exchange, a relationship between the amount of money in the economy, the rate at which it moves across transactions, and the nominal level of GDP. The relationship had been noted much earlier by John Stuart Mill and David Hume. Fisher wrote out the equation and from it developed a monetary theory of economic activity. The equation says:

$$MV = PQ,$$

where M is the amount of money in the economy, V is its velocity—the rate at which money sails through the economy, P is the price level and Q is the quantity of goods and services produced by the economy. The equation implies that when M rises, holding Velocity constant, PQ will rise. More money injected into the economy can be associated with higher nominal GDP. Going a bit further, we can see that when M rises and V and Q are constant, then P, the price level, will rise; that is, inflation will increase. But what happens when V heads south, other things being the same? PQ will fall.

The next chart shows the amount of money in the economy, as measured by the total of currency and demand deposits, which is called M1 by the Fed, and the level of its velocity.

Money & Velocity: 1Q2000 – 4Q2015

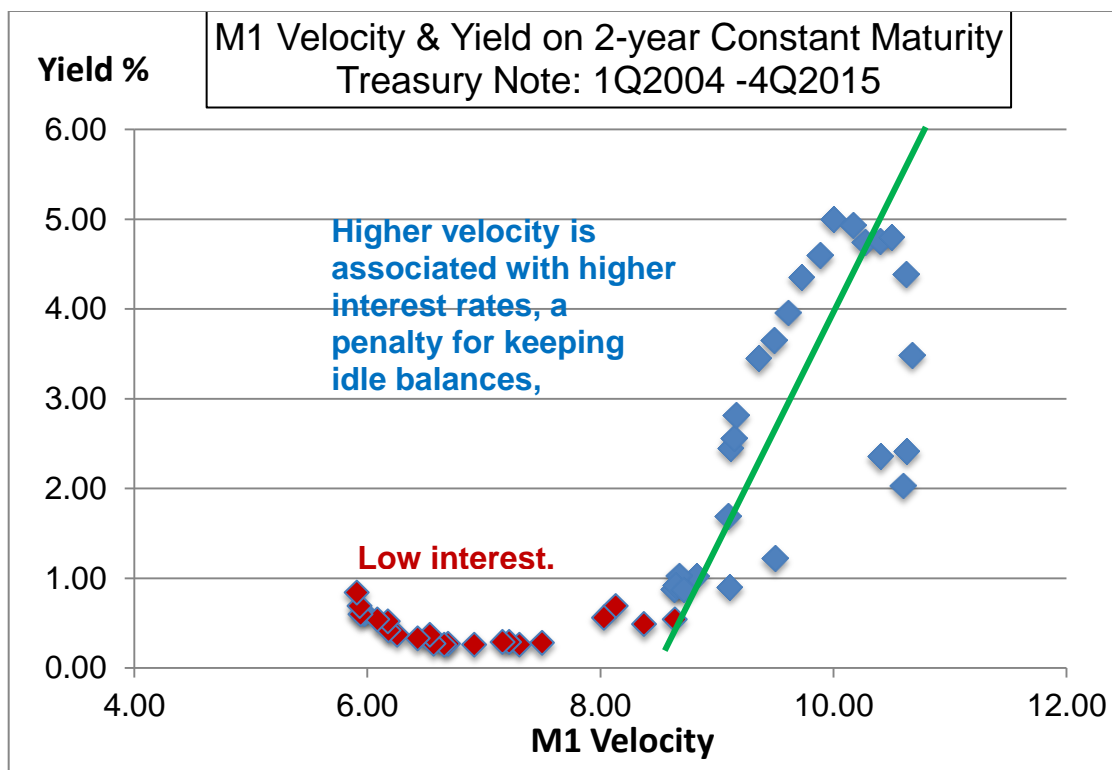


Notice that since the Great Recession in 2008, the money supply has grown markedly and velocity has fallen. Put another way, there is a lot of money on the sidelines, not circulating in the economy. GDP growth has been pale for years.

Why might that be? Part of the answer relates to the cost of holding idle cash balances. If interest rates are low, economic agents have less reason to hustle their cash through the economy. Low interest rates go with low velocity, which can translate into slower economic activity. At least this is one explanation. We will consider another shortly.

The next chart shows a mapping of velocity into the interest rate on 2-year constant maturity U.S. Treasury notes. I have marked the period of low interest rates in the chart when there is little movement in velocity. The remaining data points suggest a pattern that confirms the notion that higher opportunity cost of holding idle cash leads to more vigorous money use. What we have here is an image of the liquidity trap, a situation where due to low interest rates, increases in the money supply yield little in the way of GDP increases.

The liquidity trap explanation that monetary policy may cease to be effective in energizing economic activity grew out of the work of J.M. Keynes. A competing theory offered by adherents to the Austrian School of Economics argues that what some may call a liquidity trap is actually a condition that emerges after years of misguided investment generated by erroneous government policies. An example would be seen in massive growth in subsidized housing mortgages that led to too much residential investment. This argument suggests that financial markets will not function “normally” until the excess investment is depreciated out of the system.



What does all this say about Fed interest rate policies and future GDP growth? The Fisher equation and the velocity/interest rate relationship suggest that breaking the Fed's zero interest rate will lead to higher velocity and more GDP. But remember, the equation is about nominal GDP, not necessarily real GDP. This implies that higher velocity will generate higher inflation, at least until goods production increases.

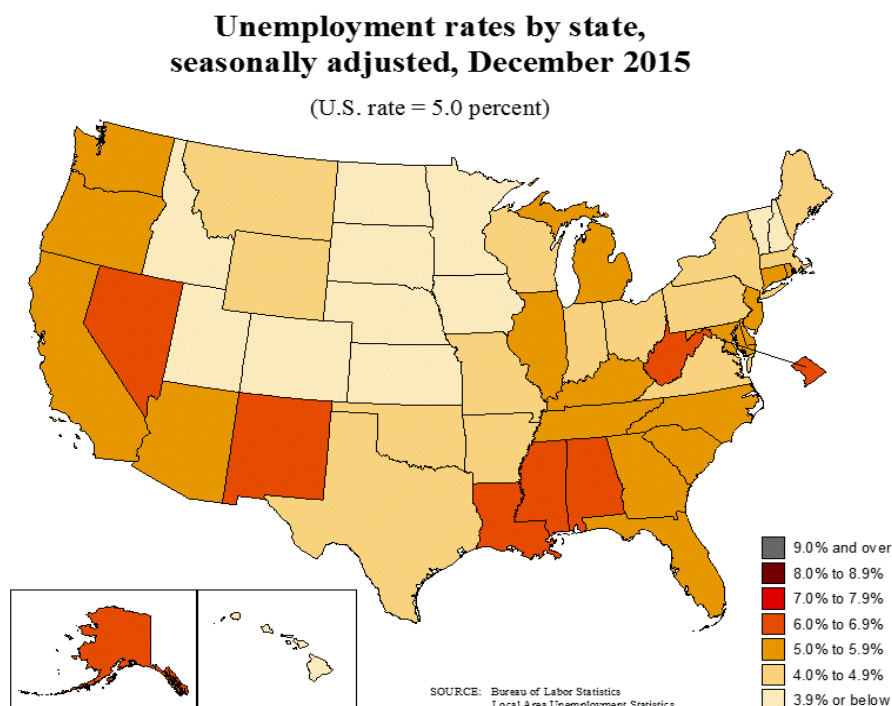
And how might the Fed go about raising interest rates? Consider this approach: at present, the Fed pays 25 basis points in interest on bank reserves held by the Fed. According to CATO monetary economist James Dorn this racks up \$6 billion annually paid to banks by U.S. taxpayers. Put another way, the Fed offers a 100% sure thing, a 0.25% return to banks that deposit their reserves with the Fed. This gives an incentive for banks to keep money on the sidelines instead of lending it, which reduces velocity. This Great Recession policy has helped banks strengthen their balance sheets, but at the expense of generating more economic activity.

Eliminating the payment on bank reserves might be a meaningful way for the Fed to raise interest rates and accelerate economic activity. But get this, in their most recent ruminations on the matter, the Fed indicated a possibility of raising the 25 basis point payment to 50 basis points, which suggests paying out \$12 billion a year to banks, at the expense of taxpayers.

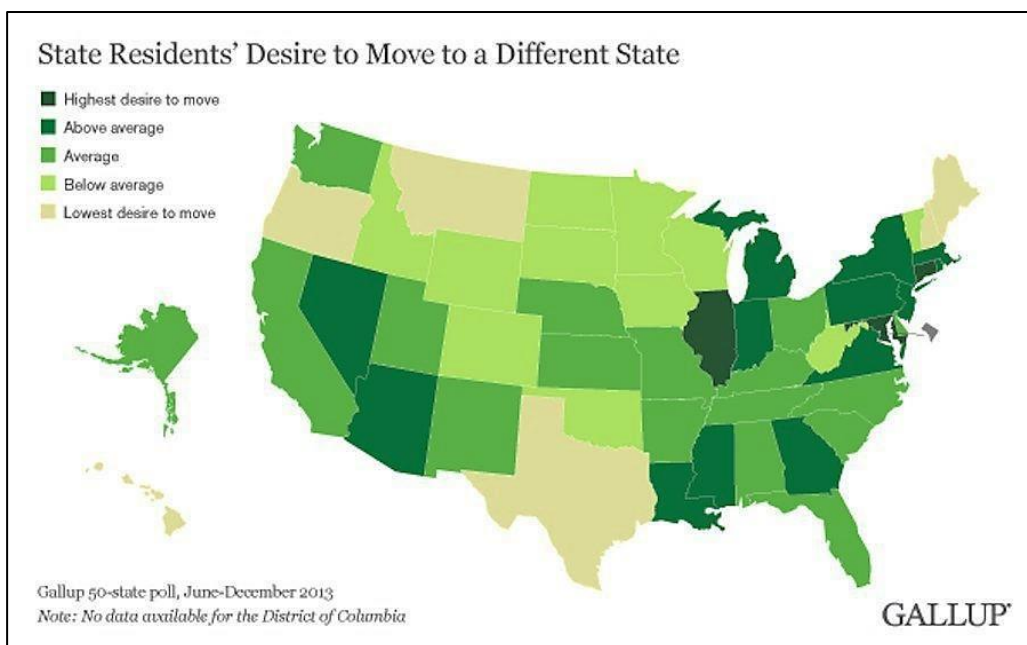
Go figure. But don't stay to long. This seems like another Bootlegger/Baptist story. The Bootleggers? Banks of course. And the Baptists? Those who argue that our fragile, too-big-to-fail, financial system must be shored up to handle the next economic shock, which is surely bound to come....eventually.

The geographic imprint

Variations in data across the 50 states provide one way of looking at the results of how economic outcomes are transmitted geographically. Consider first December's state unemployment rates. The Bureau of Labor Statistics paint brush chooses light colors for low unemployment rate states. The December outcomes are still positively affected by energy production by those wonderful square and not-so-square states in the middle of the map.

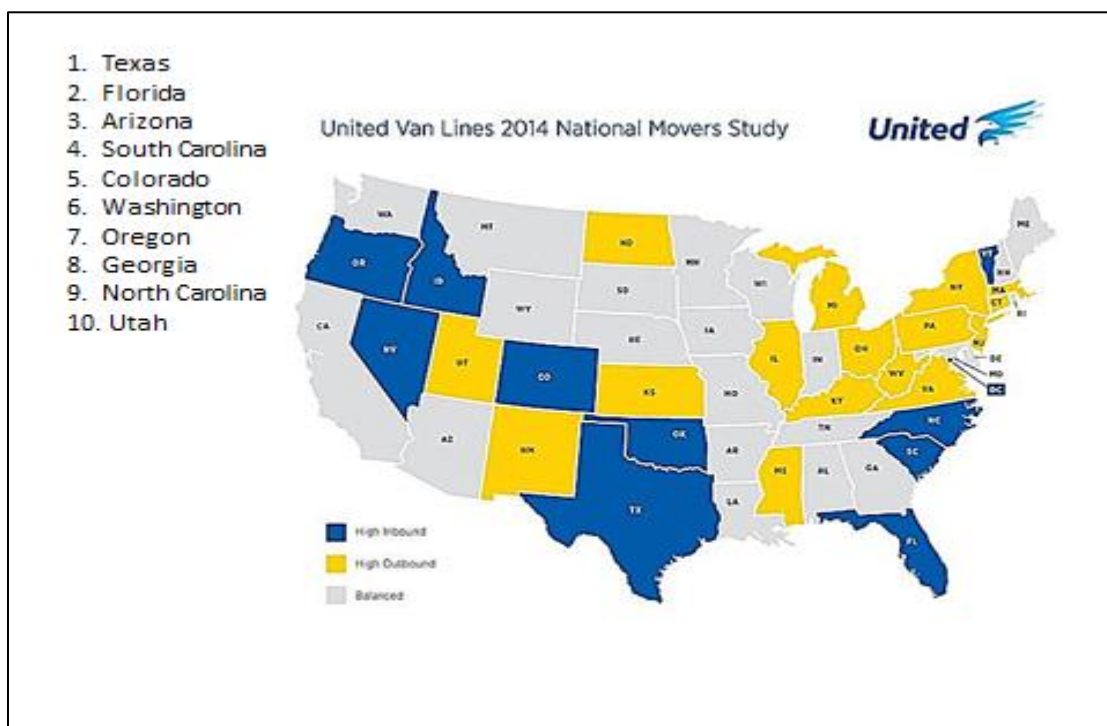


I show next a map for 2010 to illustrate how much progress has been during the five intervening years.



According to Gallup, the “let’s get out of here” states are Illinois, where 50% wish to leave, Connecticut (49%), Maryland (47%), Nevada (43%), Rhode Island (42%), New Jersey (41%), New York (41%), Massachusetts (41%), Louisiana (40%) and Mississippi (39%). At the other end of the spectrum, where people seem to be happily settled and fewer wish to pack up a U-Haul, are Montana (23%), Hawaii (23%), Maine (23%), Oregon (24%), New Hampshire (24%), Texas (24%), Colorado (25%), Minnesota (25%), South Dakota (26%) and Wyoming (27%).

While Gallup’s data are based on surveys of 600 people in each of the 50 states, a report from United Van Lines tells us what people actually did. The next map confirms much of the Gallup results. I’ve listed the top destination states on the map.

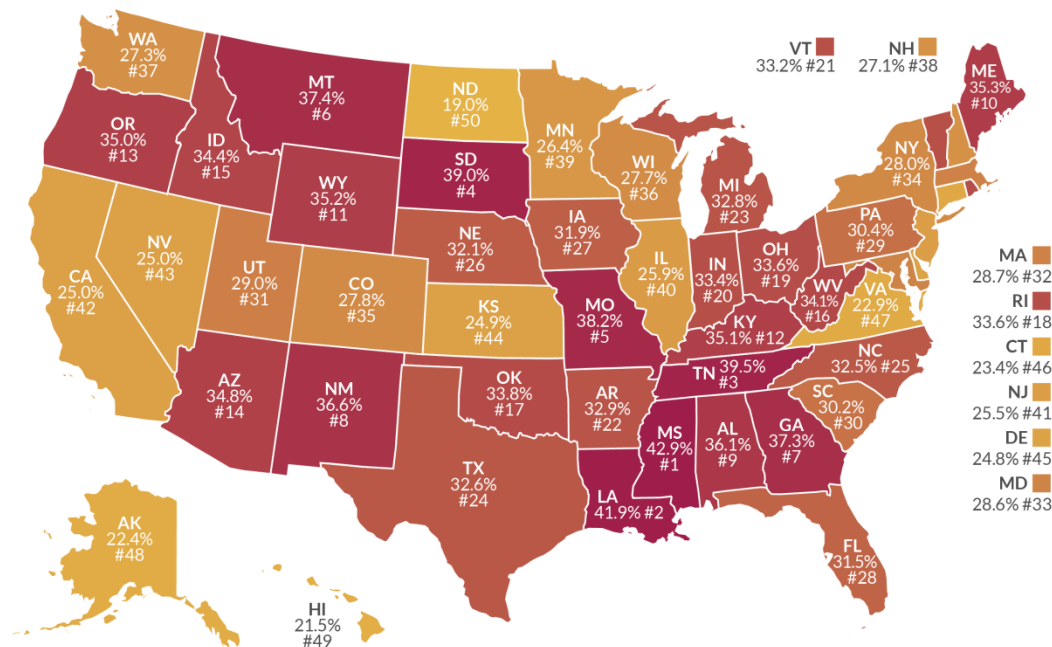


Which states depend most on federal aid?

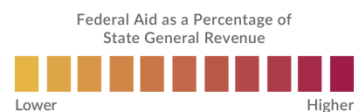
Moving to greener pastures may be one way to bring improved income or happier times. Getting government assistance can be another. When asked which states loom large on the government's payrolls, many people are sure they know the answer. Of course, it must be the southern states. But as the next chart tells us, that answer is just partially correct. Yes, Mississippi, Louisiana, and Tennessee rank 1, 2, and 3, respectively, but fifth place goes to S. Dakota, and Montana comes in 6th. Georgia is 7th and Maine is 10th. Examination of the map will shake some other prejudices. For example, South Carolina ranks 30th, below Ohio, Pennsylvania and Indiana.

Which States Rely Most on Federal Aid?

Federal Aid as a Percentage of State General Revenue (FY 2013)



Notes: Figures are calculated by dividing each state's "Intergovernmental Revenue" by its "General Revenue." "General Revenue" includes all tax revenue but excludes utility revenue, liquor store revenue, and investment income from state pension funds. D.C. is designated as a local entity by the U.S. Census Bureau and thus not included here.
Source: U.S. Census Bureau; Tax Foundation.

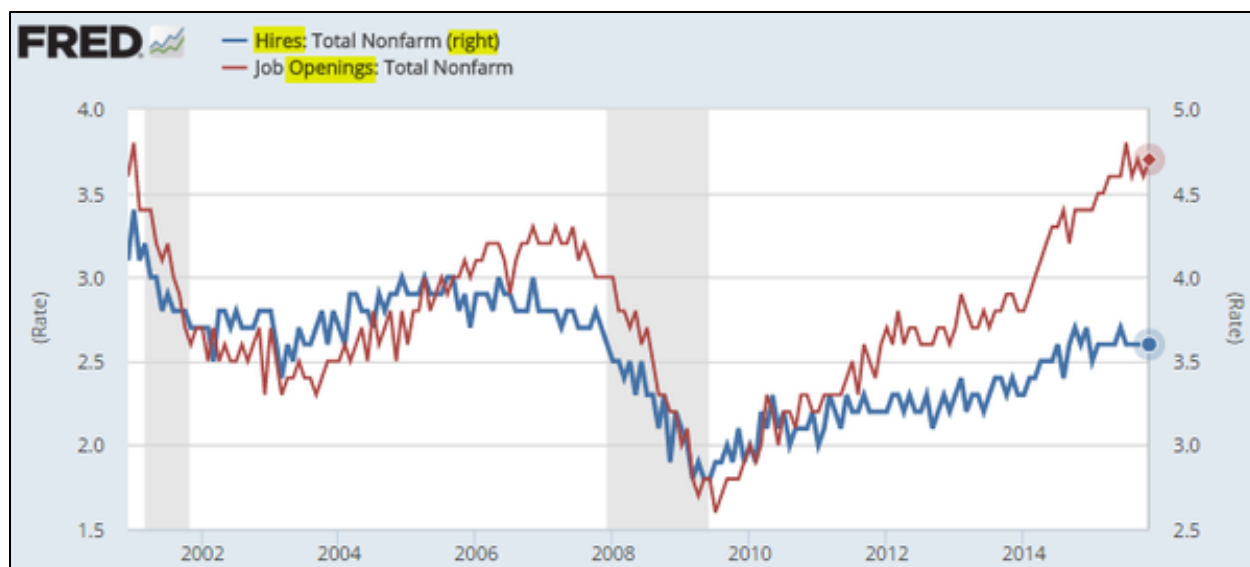


TAX FOUNDATION

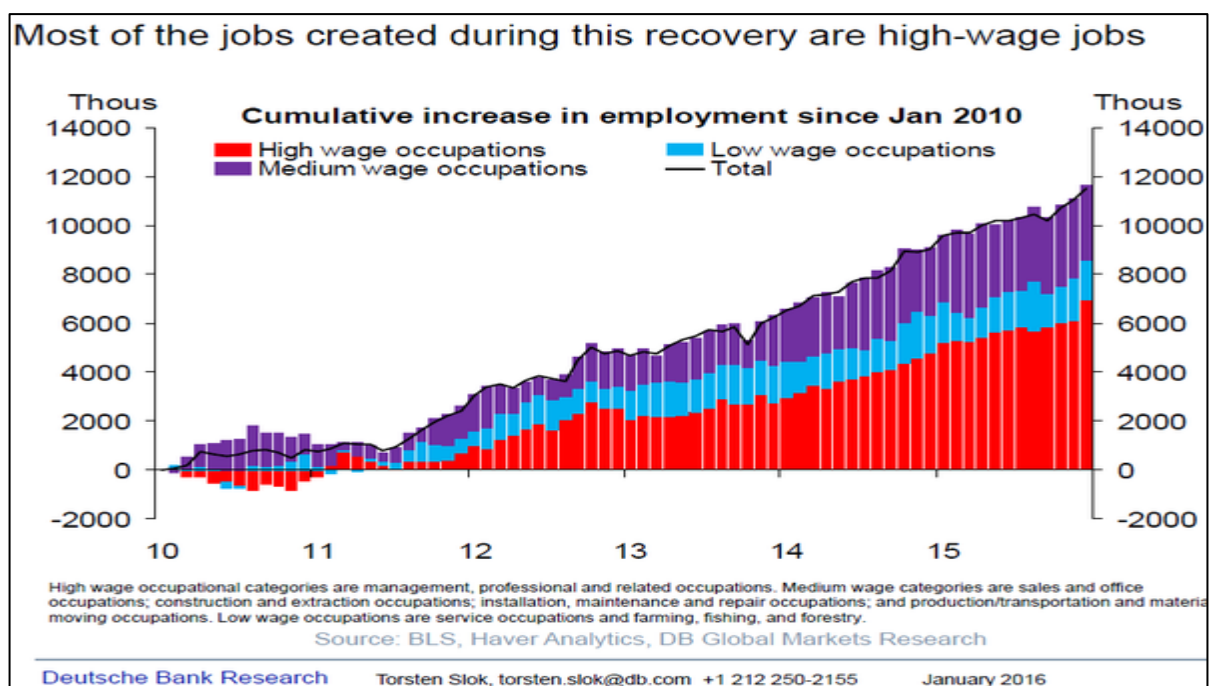
@TaxFoundation

Employment, wage growth and regulation

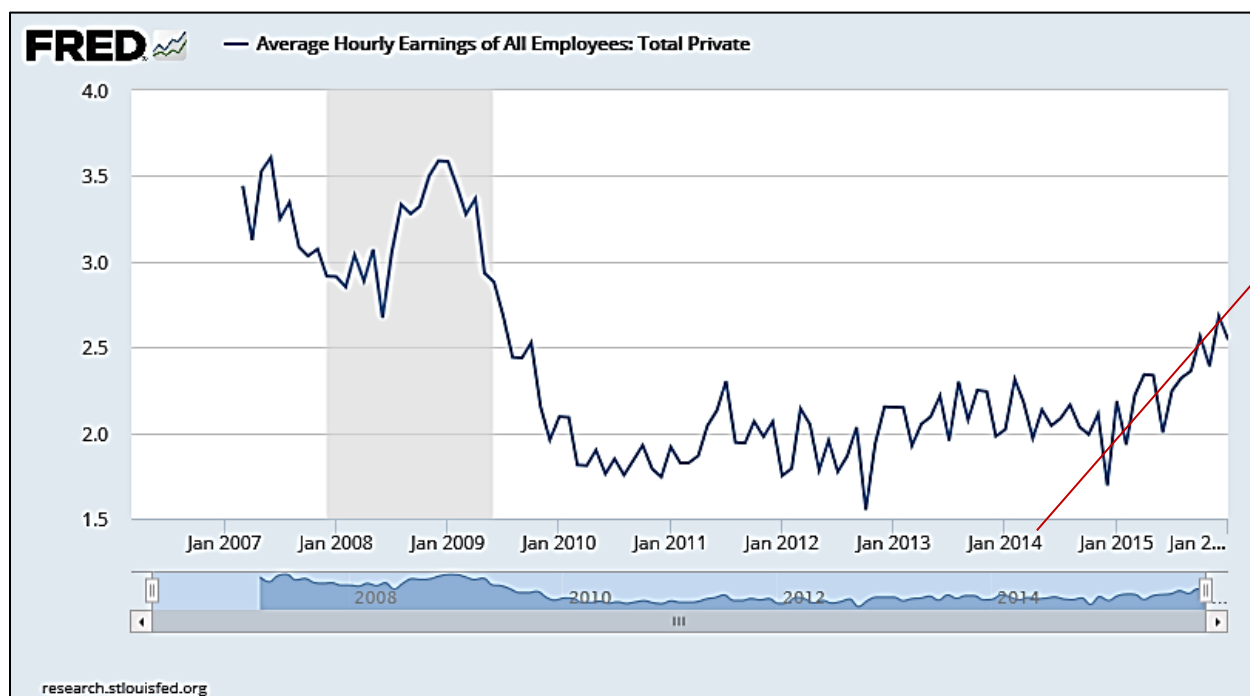
Recently, the Daily Shot, that wonderful daily source of macroeconomic interpretation, provided a St. Louis Fed chart that mapped together growth in job openings with growth in hires. The surprising data, shown in the next chart, say that the post-recession economy is generating far more job opportunities than labor markets can fill. A quick look at the chart tells us that gap between growth in job opportunities and hires has grown significantly in recent years.



The data suggest there is a severe mismatch between work opportunity and qualified workers. I show a related chart next. This one provides an analysis of the kinds of post-recession jobs that have been filled with regard to pay levels. The data say we are enjoying an economy that is providing lots of higher paying jobs.



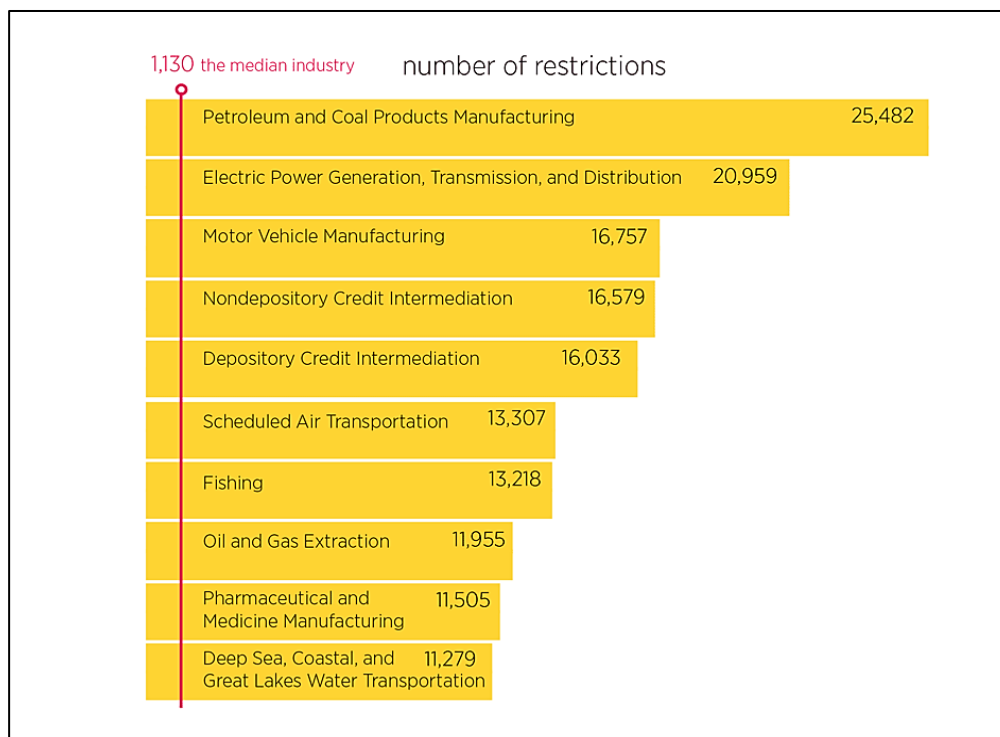
Well, if growth in job opportunities is outstripping hires, and if most of the job opportunities involve higher paying jobs, then we ought to see some increases in wages. This is exactly what we see in the next chart.



Another look at the regulatory burden

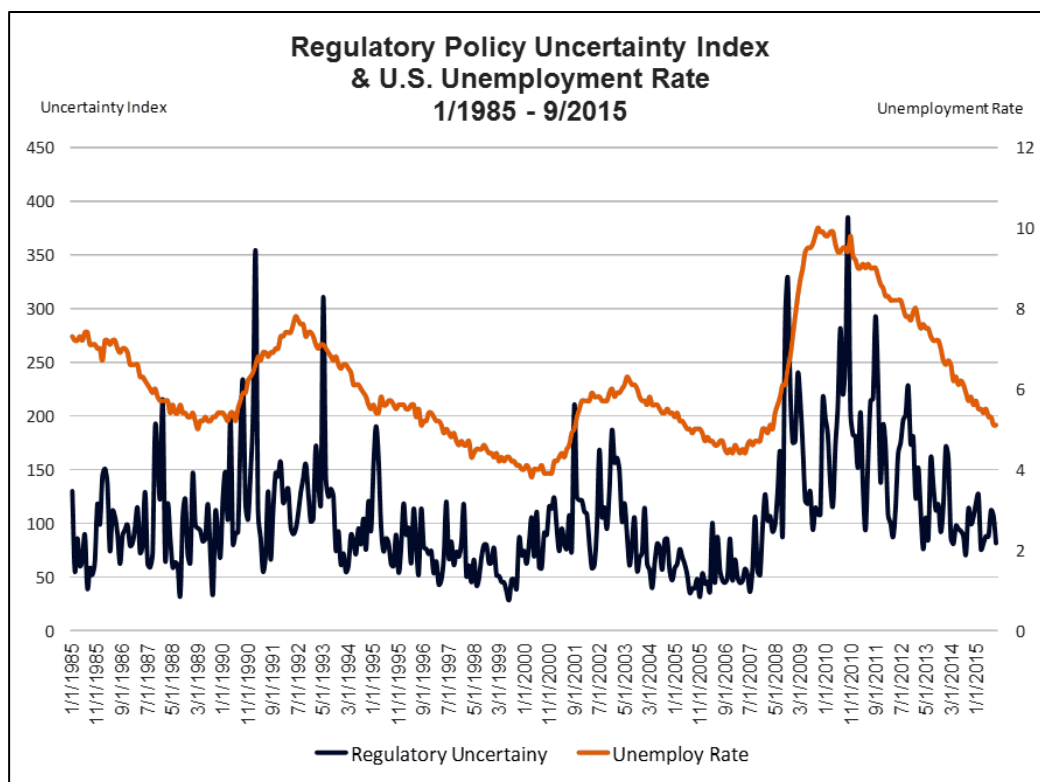
Patrick McLaughlin and Oliver Sherouse, two researchers at George Mason University's Mercatus Center, have counted the number of command-and-control restrictions found in the Code of Federal Regulation for major U.S. industries. Here are the 10 most regulated U.S. industries.

2014's 10 Most Regulated Industries



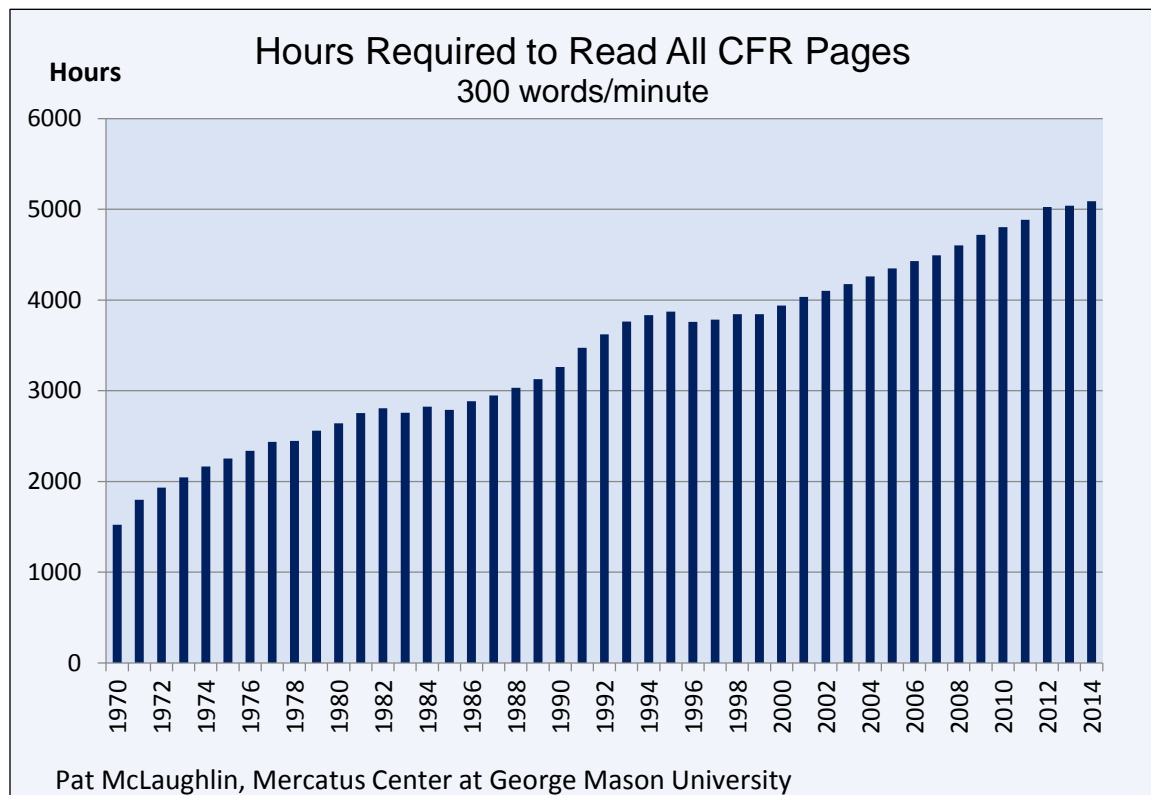
Petroleum and coal rank number one, followed by electricity producers and then automobiles. While scanning the list, keep an eye on the median number of restrictions for all industries, 1,130. Of course, that is the count which cuts the distribution at the mid-point.

But these are just numbers, and large ones at that. What about the effects? Can we link regulation to employment? The next chart map does just that. It connects the uncertainty that comes with the regulatory burden to the unemployment rate. The U.S. regulatory uncertainty index shown in the chart is based on the frequency of certain words found in major daily newspapers, words like regulation and uncertainty that appear in the same story. When mapped to the unemployment rate, the data seem to confirm what common sense tells us. If you are CEO of a heavily regulated industry, then rising regulatory uncertainty becomes converted into hiring uncertainty. There's a tendency to delay expanding your payroll while awaiting improved regulatory certainty.



Just in case you wish to read through the Code of Federal Regulations to get a grip on the extent to which your industry is regulated, here's how many hours it will take and how that number has grown since 1970. Better get a comfortable chair, it will take 5,000 hours at the normal pace of 300 words a minutes to get through the 2014 edition!

Enjoy!



Spring Reading

Instead of reading the Code of Federal Regulations, consider a few books. I guarantee that Matt Ridley's latest, *The Evolution of Everything* (New York: HarperCollins, 2015) will open your mental eyes to some new ideas and get some fresh gears turning about how the world works. Renowned for his *The Rational Optimist*, Ridley writes from the perspective of a former editor of *The Economist*, member of House of Lords, and widely celebrated zoologist. Ridley was Impressed years ago by the market process and its ability to gather and conserve information from countless individuals and sources. He was turned on by that idea and how Adam Smith's invisible hand theory had inspired Charles Darwin's adaptation and evolution theory. As a result, emergent systems, those self-organizing processes that generate order from chaos, all without planning, are the bold-faced theme of the book. Reflecting the richness of Ridley's mind, there are chapters devoted to the evolution of the universe, morality, life, genes, culture, the economy, money, and more. His discussion of the evolution of technology is my favorite chapter. Here he bombards the reader with stories of simultaneous discovery of major inventions and ideas, arguing all along that because of the fertility of billions of human minds, fresh ideas and technical breakthroughs will come whether there are patent-based incentives or not.

Everyone has had the experience of reading an inspiring book only to wish that it had been read sooner. This was the case for me as I read recently Nobel Laureate Vernon Smith's 2008 autobiography, *Discovery: A Memoir* (Bloomington, IN: AuthorHouse, 2008). Certainly not intended for just economists, the book recounts Smith's life journey from childhood in a struggling but immensely happy family in Kansas to completing a Caltech engineering degree and earning a PhD in economics from Harvard. It was shortly after Harvard that Vernon settled in at Perdue and pioneered the invention and development of experimental economics.

This extraordinary effort, which went against the discipline's grain, made economics for the first time a laboratory science. While telling his story, Vernon introduces the reader to poetry that has inspired him, to people who guided him, and to deep spiritual thought that facilitates his constant ongoing effort to discover more about human behavior. Along the way, Vernon Smith describes his Asperger's syndrome in clear terms and explains how Asperger's gave him an advantage in his discovery enterprise. And if this is not enough to entice a prospective reader, there is more. Vernon, a gourmet cook, also gives a detailed recipe for preparing his own special chili as well as how to cook one-of-a-kind hamburgers using home-grown tomatoes. I guarantee you will find *Discovery* a different but also very inspiring book.

Finally, something very different, at least for me. Take a look at Theresa Brown's *The Shift* (Chapel Hill: Algonquin Books of Chapel Hill. 2015). Theresa Brown has written a fascinating book about what it is like to be cancer ward nurse for one intense 8-hour shift. This is about America at work. Just 254 pages long, the book is a very personal account that focuses on the trials, tribulations, success and sadness faced by four patients, their families, and the hospital team that serves them. As is often the case with cancer patients, some in the story are involved in repeat treatments. Others who thought their illness was in remission face a recurrence and yet another round of hospital care. The nurses and the patients get to know each other real well. The reader learns about high tech medicine, the now elevated status accorded nurses (finally) and also the critical importance of the human touch. Brown is unusually well equipped to tell the story. She is a former university professor with a PhD in English who decided to follow her heart and become a registered nurse. This enjoyable and at times inspiring read sheds light on the economy's fast growing healthcare sector and the very real people whose dedication keep it going.